

given amount of light, because it does not follow that, irrespective of modes of combustion, the same amount of gas consumed will furnish the same amount of light. You may burn a limited quantity of gas and have a very splendid light with one arrangement while with another a prodigious consumption may be going on and but little light obtained. It is then important to ascertain under what circumstances a maximum amount of light is obtained. The arrangement which I have placed on the table this evening, and which I think brings the true principles of economizing gas into application, is the very beautiful "tube burner" of Mr. Leslie, which is most probably well known to many of you. I am sorry my time will not permit me to go into the details of the consumption of gas, but, perhaps, it is scarcely necessary; but there are some points about this flame which may be made obvious on the instant, and without long calculations. See the beautiful, clear, steady, white flame as it stands almost motionless in the glass "combustion-chamber." Now let me remove this glass and replace it by one of the common old cylindrical kind; the quantity of gas burnt is just the same as before, but every one sees that the light has lost all its best qualities. I have admitted too much air by so doing, and therefore get less light; the deposit of carbon goes on as before, but it now goes on too rapidly, and we have a smoke. To get the same amount of light with this glass we must burn twice the quantity of gas which was required with Mr. Leslie's burner.

Having expressed a very favourable opinion of Mr. Leslie's burner and his glass "combustion-chamber" on theoretic grounds, and since then tried them practically with much satisfaction, we are glad to find ourselves strengthened by such an opinion as that we have given above.

The burner and glass are making their way into use steadily. The exterior of the Ordnance office, Pall Mall, affords a good specimen of their value for street lighting. The London Gas Company have put on eight of these burners from Scotland-yard to the corner of Whitehall. This company, we may mention, has the contract with the Woods and Forests for the whole of Regent-street, from the palace at Westminster right through to Regent's-park.

At the General Post-office, St. Martin's-le-Grand, the burners have been in use three months, and if we are rightly informed the saving of gas over the corresponding thirteen weeks before is about eight hundred thousand cubic feet. The Thames Tunnel, also, is now lighted by them.

#### RIGHT OF ARBITRATORS TO COPY PLANS ENTRUSTED TO THEM.

ROYAL ITALIAN OPERA-HOUSE, COVENT GARDEN.

SIR,—Under a deep sense of the duty I owe to the profession at large, as well as to myself, I feel bound, however reluctantly, to expose the following facts, which, if tacitly sanctioned, I consider would be derogatory to my professional character and highly prejudicial to the ends of justice, and I hope to meet at your hands the candour and support that my case deserves, and which it is well known you never withhold.

The lessees of the Royal Italian Opera House chose, about a year after its completion, to contest two-thirds of my bill of 2,300*l.* for superintending the erection of it, &c., obliging me to institute legal proceedings to recover the balance of it, when, after paying into court 25*l.* more than they had offered me just before going to the jury, they begged a reference (which I had originally offered and they refused). To this I acceded, and Mr. T. L. Donaldson and Mr. T. Bellamy were appointed referees, and by them Mr. Samuel Angell was named as umpire, and, as the referees could not agree, Mr. S. Angell became the sole arbitrator and the depository of all my original designs and documents necessary to substantiate my claim.

On Mr. Angell's award being delivered, (of which, as you have, perhaps properly, refused to admit any comments on it, I must say nothing, whatever I may think), I applied at his office for my papers, and found to my astonishment that the most complete of my designs, working drawings, and papers, were

missing from the portfolios and tin boxes, and that many had been copied in Mr. Angell's office by two of his assistants, one of whom, being found by me in the act, was obliged to admit that it was by Mr. Angell's order that he had done so. Such proceedings seemed to demand an explanation, and I wrote to him that after the solemn assurance he had given to me in the presence of Mr. Donaldson, Mr. Smith, and others, as to the safety of my papers when delivered into his hands, I could not but regard his conduct as wholly unjustifiable, inasmuch as he was acting as umpire in the performance of a professional and judicial duty, and I requested him to deliver to me the other documents in his possession, and to render to me the most explicit explanation on the subject. Mr. Angell's reply was that the documents I claimed of him remained in his strong chest during his absence from town, but he admitted that my drawings and extracts of my papers had been copied in his office by his authority, and that he considered he had a perfect right to have any copies or extracts made from any documents or drawings put in by me as evidence in support of my claim, in order that his memoranda might be complete, should there be hereafter any occasion to refer to it; and he went on to assure me that I need be under no apprehension whatever, and that he was quite prepared at any time to show the tracing made from my drawings to Mr. Donaldson, or to Mr. W. Cotterill (my solicitor), in expectation of satisfying them as to his mode of acting.

These explanations cannot be regarded as offering anything like satisfaction, and as to his giving explanations to Mr. Cotterill, or Mr. Donaldson, I have only to refer to these gentlemen's letters, in which Mr. Donaldson says, that "the award has caused great surprise and disappointment to him, particularly as regards Julian's salary, and that after much thought he could not understand why copies of my drawings were taken by Mr. Angell, they not being necessary to substantiate any point in the award, and that in so doing he had erred in judgment in this case altogether;" while Mr. Cotterill, the other gentleman referred to, wrote to me that "he had read over my correspondence with Mr. Angell, but did not see any use in examining the copies he had taken from my drawings. Certainly," Mr. Cotterill, says, "I cannot see any possible use in Mr. Angell's copying any of them for any purpose of the arbitration."

To these opinions of the gentlemen to whom he appealed, and of a great many more professional men to whom I have mentioned the circumstances, it is necessary to add, that one of the copies made from my designs, and on which his assistant was discovered, is marked No. 52, the title of which runs thus—"Longitudinal section of the new theatre, saloons, stage, &c., from the foundations to the roofs, complete as executed." On this copy Mr. Angell's assistant has written "Copies of this and some other drawings of Mr. Albano's works of Covent Garden by Mr. Angell's order were taken by me and Mr. Wood, and are in Mr. Angell's possession. September 27, 1848, G. Judge, jun."

The law affording me no redress at this stage, I am obliged to state now what otherwise I would under no other circumstances bring forward. I have been a member of the profession of civil engineers for a quarter of a century in this my adopted country, and have been engaged upon various works, which I presume have sufficiently established my claim to some ability; if not I would willingly allow my reputation to be estimated by what I have done at Covent Garden Theatre, the manner in which it has been accomplished, the very short period in which it was effected, and the smallness of the expenses attending it, considering that it required fifty-four original and elaborate designs, and above a hundred working drawings, specifications, &c. &c. (all put in evidence), besides daily and nightly attendance to the extent of from sixteen to twenty hours a-day, directing, and superintending from the very foundations the construction and decoration of the new theatre, her Majesty's apartments, and the improvement of the whole establishment; converting at the same time the whole of the old materials; on which were daily engaged from 1,000 to 1,600 workmen of all trades, as well

as the attendance of six of my assistants and a clerk of the works, all their expenses and salary being defrayed by me during above six months up to the opening of the theatre and for about eight months afterward the expenses of myself and two assistants. I can confidently appeal to Mr. Hoaking, who, in his official capacity as official referee, inspected most minutely all my designs, and in his evidence declared that he saw the whole of the works and foundations, and that, to the best of his judgment, they were executed in an admirable manner, and displayed great ability without extravagance, and that he should not have allowed the theatre to be opened unless it had been properly done. I could also appeal to the evidence of Mr. Allison, Mr. Braithwaite, Mr. Godwin, Mr. C. H. Gregory, Mr. W. Laxton, and Sir John Rennie, who had often visited the works during their progress, and unanimously declared it to be a very creditable work, and considering its great intricacy and the short time allowed, it was executed in a scientific, workman-like, and economical manner, and as a work of art carried on with great skill and success; and they all spoke very particularly as to my indefatigability and the fairness of the amount of my charges for a work unequalled for the great sacrifice and exertion it demanded, and which had been admired by all impartial judges, to whom, as well as for the favourable unanimous opinion expressed by the public press, I owe a deep debt of gratitude.

I consider myself in duty called upon, on public as well as on private grounds, to appeal to the judgment of my profession, either as engineers or architects, to the members of which I look with confidence, satisfied that their high character and honourable feelings will induce them to form a right estimate of these proceedings, and will not allow my professional rights to be trampled on with impunity. I contend that Mr. Angell had neither right nor pretext whatever to take copies of my designs; his duty in the office to which he was appointed was to determine on the remuneration, which, in equity, I was entitled to upon my claim, without having any further duty to perform; and certainly nothing which could render it necessary or proper for him to retain copies of my drawings; and I leave it to the profession and to the public to form their opinion, both as to his conduct and the motive which may have influenced him on this occasion to copy my papers, which he still retains in his possession, conduct which I contend is wholly unprofessional and indefensible, and I refer it to the profession and to the public, on whose well-known love of impartial justice and hatred of oppression I can confidently rely.

I am, Sir, &c., B. ALBANO.  
Office, 22, King William-street, Strand,  
February, 1849.

#### NOTES IN THE PROVINCES.

THE church of St. Nicholas, Ipswich, has been considerably altered and enlarged. The old pewing has been replaced by seating in form of benches, but with separate sittings. In a part added to the north aisle a window partly filled with stained glass has been put up, the stained glass the work and gift of Mr. R. B. King. The alterations in all have cost between 500*l.* and 600*l.*, of which the incumbent, Rev. M. G. Edgar, contributed 100*l.* and oak of equal value. Some curious carved figures, said to be of Saxon origin (?) have been discovered, and inserted in the north wall. At the Ely sessions the propriety of taking down the old court-house at Wisbech, said to be in a dangerous state, and of erecting a new one next the gaol, was lately taken into consideration. It was stated that the old materials were worth 1,600*l.* to 1,800*l.*, a sum sufficient, it was said, to build the new one. The foundation-stone of the Philanthropic Society's farm-school and chapel will be laid by H.R.H. Prince Albert on 30th April, near the Redhill and Reigate station of the Brighton Railway. The re-building of Holy Rhod Church, Southampton, proceeds with quickness, and the style and dimensions of the arches, and the proportions of the chancel, are now rendered clear, but the roof of the building closely behind the east window is much complained of in the local papers. The vicinity of Portsmouth has been much improved, it is